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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,937	07/18/2003	Karl Schrodinger	M&N-IT-462	3471
24131	7590	01/04/2005	EXAMINER	
LERNER AND GREENBERG, PA P O BOX 2480 HOLLYWOOD, FL 33022-2480			NGUYEN, HAI L	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,937

Applicant(s)

SCHRODINGER, KARL

Examiner

Hai L. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10, 20 and 21 is/are rejected.
- 7) ☒ Claim(s) 4-9 and 11-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendments received on 11/02/04 have been reviewed and considered with the following results:

As to the rejections to claims 1-9 and 11-21, under 35 U.S.C. 112, 2nd paragraph, Applicant's clarifications and amendments have overcome the rejections, as such; the rejections have been withdrawn.

The prior art rejections to the claims made in the previous Office Action mailed on 7/29/04 are now withdrawn in view of Applicant's amendments, the amendments have been considered but are moot in view of a new action on the merits appears below.

Claim Objections

2. Claim 1 is objected to because of the following informalities: in the last line, after "amplified", --signals-- should be added. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1-3, 10, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Isken et al. (US 6,710,645).

With regard to claim 1, Isken et al. discloses in Figs. 1-2 a circuit comprising an input differential amplifier (V1) generating first and second amplified signals (E, EX) in response to first and second differential input clock signals; first and second inverters (V2, note that it is inherent differential amplifier comprising inverters) generating respective first and second differential output clock signals (U, UX); and an offset compensation circuit (CP, SE) coupled to the first and the second inverters and adjusting a difference between the two output clock signals to a constant value, the offset compensation circuit further connected to the input differential amplifier and receiving the first and second amplified.

With regard to claims 2 and 3, the references also meet the recited limitations in these claims.

With regard to claim 20, the differential output clock signals are fed to a differential line driver (V3).

With regard to claim 10, Isken et al. discloses in Figs. 1-2 a circuit comprising an input differential amplifier (V1) generating first and second amplified signals (E, EX) in response to first and second differential input clock signals; first and second inverters (V2, note that it is inherent differential amplifier comprising inverters) generating respective first and second differential output clock signals (U, UX) from the first and second amplified signals, the inverters having respective input pulse shapes and an optimum switching point (the switching point, which causes the offset voltage on the output side on V is either 0 or minimal, is considered as optimum switching point); and a control circuit (CP, SE) receiving at least one of

the first and second differential output clock signals, the control circuit driving the inverters and shifting the input pulses of the inverters to the optimum switching point of the inverters.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Isken et al. in view of R (US ,362,737).

The above-discussed the circuit of Isken et al. meets all of the claimed limitations except for the limitation that intended use all of the circuit components are embodied using CMOS technology. Davidescu teaches in Figs. 1-5 a similar circuit having circuit components, which are embodied using CMOS technology, as recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to implement that teaching of Davidescu with the prior art (Figs. 1-5 of Davidescu) for the advantage of saving power and reducing size of the circuit.

Allowable Subject Matter

7. Claims 4-9 and 11-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose or fairly suggest a circuit configuration (as shown in Fig. 2) for regenerating clock signals, as recited in claim 4, having specific structural limitations such as an offset compensation circuit (2, 7, R5, R6, C4) comprises a control amplifier (7 in instant Fig. 7) having an input receiving the two output clock signals (Ep, En) and outputting output signals (Ioffsp, Ioffsn) derived from the output clock signals, and a further differential amplifier (2) generating first and second amplified (Cp, Cn), offset-compensated signals from the first and second amplified signals (Bp, Bn) of the input differential, amplifier and the output signals of the first control amplifier and feeding the first and second amplified, offset compensated signals as drive signals to the inverters (In1, In2); and being configured in combination with the rest of the limitations of the base claims and any intervening claims.

The prior art of record fails to disclose or fairly suggest a circuit configuration (as shown in Fig. 2) for regenerating clock signals, as recited in claim 11, having specific structural limitations such as a control circuit comprises a control amplifier (8) having, an input receiving an average value (4) of the first and second differential output clock signals (Ep, En) and a desired value (5) and outputting an output signal, and a differential amplifier (3) generating first and second drive signals (Dp, Dn) for the first and second inverters (In1, In2) in response to the output signal of the control amplifier and input signals (Bp, Bn) fed by one of the input differential amplifier (1) and a component connected downstream thereof; and being configured in combination with the rest of the limitations of the base claims and any intervening claims.

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Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 571-272-1747 and Right Fax number is 571-273-1747. The examiner can normally be reached on Monday-Thursday.

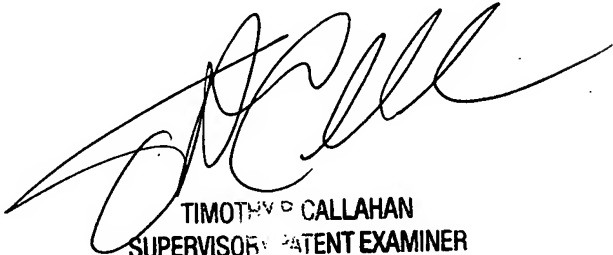
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The official fax phone number for the organization where this application or proceeding is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1562.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HLN 
December 21, 2004


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